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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,365	03/18/2004	Patrick Brant	2003B044/2	7914
7590 04/15/2008 ExxonMobil Chemical Company Law Technology P.O. Box 2149 Baytown, TX 77522-2149				
			EXAMINER	
			LEE, RIP A	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			04/15/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/803,365

**Applicant(s)**

BRANT, PATRICK

**Examiner**

RIP A. LEE

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on January 9, 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 5, 8-10, 24 and 30-31 is/are pending in the application.
- 4a) Of the above claim(s) 1, 4, 5, 8-10, 24, and 31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 and 32-63 is/are allowed.
- 6) ☒ Claim(s) 64-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

This office action follows a response filed on January 9, 2008. Claims 1, 5, 8-10, 24, 31, 32, 40, 44, 48, and 52 were amended, and new claims 56-71 were added. Claims 1, 4, 5, 8-10, 24, and 30-71 remain pending.

1. Newly submitted claims 1, 4, 5, 8-10, 24, and 31 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Cited claims, as currently amended, are drawn to a propylene copolymer. Claims 1, 4, 5, 8-10, 24, and 31, filed in the previous response of October 9, 2007 were drawn to a process for preparing propylene copolymer. As indicated in the restriction requirement dated December 22, 2005 and May 17, 2007, product and process claims are independent or distinct.

Since applicant has received an action on the merits for the originally presented invention (process), this invention (copolymer) has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1, 4, 5, 8-10, 24, and 31 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### *Claim Rejections - 35 USC § 102 / 35 USC § 103*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 64-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsui *et al.* (U.S. 5,336,746).

Tsutsui *et al.* discloses preparation of random copolymers of propylene having from 1-10 mole % of a C<sub>4</sub>-C<sub>20</sub>  $\alpha$ -olefin in the presence of a catalyst comprising a hafnium complex having two cycloalkadienyl groups linked together *via* an alkylene linkage (abstract). Polymers containing 90-99 mole % of propylene units, 0.5-9.5 mole % ethylene, and 0.5-9.5 mole % of C<sub>4</sub>-

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C<sub>20</sub>  $\alpha$ -olefin units are also prepared with inventive catalysts (col. 6, lines 30-37). An ethylene content of about 9.5 mole % equates an ethylene content of less than about 8 wt %. Inventive polymers may be prepared with catalysts containing compounds such as Et(4-MeInd)<sub>2</sub>HfCl<sub>2</sub>, Et(7-MeInd)<sub>2</sub>HfCl<sub>2</sub>, and Et(4,7-Me<sub>2</sub>Ind)<sub>2</sub>HfCl<sub>2</sub> (col. 9, lines 40-47). Although the reference does not show working examples in which inventive polymer are prepared with catalysts containing these metallocenes, one having ordinary skill in the art would have found it obvious to carry out such a process, and since Tsutsui *et al.* teaches these compounds as useful for making the inventive polymer, one having ordinary skill in the art would have expected such a process to work with a reasonable expectation of success. The reference is silent with respect to polymer properties, however, in view of the fact that the polymer has the same constitution as that recited in the instant claims, and in light of the fact that the polymer is prepared using substantially the same catalyst system (hafnocene with MAO activator), a reasonable basis exists to believe that the polymers prepared by the aforementioned catalysts exhibit substantially the same properties. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

### ***Response to Arguments***

4. Applicant's arguments with respect to the rejection of claims over Tsutsui *et al.* have been considered (as pertains to new claim 64) but they are not persuasive. Applicant contends that instant invention is distinguishable over the prior art since claims limit the product to a copolymer of propylene and ethylene. That is, the claims do not make reference to terpolymer. The examiner respectfully disagrees with this view because claims are drawn to a process comprising polymerizing propylene and ethylene, such that unrecited process steps are not excluded by the term "comprising." The claims also indicate that the resulting copolymer comprises 72 wt % of units derived from propylene and 5 wt % of units derived from ethylene. Said copolymer necessarily comprises an unrecited fraction of polymerized units.

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Applicant's arguments with respect to the rejection of claims over Tsutsui *et al.* have been considered fully. The reference has been reviewed in light of Applicant's remarks, and it is deemed that the prior art would not have reasonably suggested to one having ordinary skill in the art to carry out the claimed process.

5. Claims 30 and 32-63 are allowed.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu S. Jagannathan, can be reached at (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Rip A. Lee/  
Primary Examiner, Art Unit 1796

April 13, 2008